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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
IN THE MATTER OF THE **NEW PCT NATIONAL PHASE PATENT APPLICATION**
OF: Helmut HEINZ et al.
USSN: TO BE ASSIGNED
FILED: September 4, 2001
FOR: Method for Producing Circuit Arrangements
INTERNATIONAL SERIAL NO.: PCT/EP00/01770
INTERNATIONAL FILING DATE: 01. MARCH 2000 (01.03.00)

COMMISSIONER FOR PATENTS
BOX PCT
WASHINGTON, D. C. 20231

September 4, 2001

SECOND PRELIMINARY AMENDMENT

Dear Sir:

After calculating the filing fee, but before the first examination, please amend the above identified application as follows.

Referring to the Literal Translation of International Application
PCT/EP00/01770

In the Claims:

Please cancel claim 1 and enter new claims 7 to 11 as follows.
Claims 2 to 6 have been cancelled by the First Preliminary Amendment to Minimize the Filing Fee.

Please enter new claims 7 to 11 for examination.

- B 3/
- 1 7. (new) Method for producing of circuit arrangements, the
 - 2 components of which are attached to the top surface (12) of
 - 3 a carrier body (5) having thermal lead-through contacts
 - 4 (7), wherein, prior to the soldering operation, the thermal
 - 5 lead-through contacts (7) are closed from the underside

(13) of the carrier body (5) with screen printing material (8) by a screen printing process, and wherein a first metallizing layer (6) forming the base metallization, is applied on the carrier body (5) and in the thermal lead-through contacts (7), characterized in that a highly viscous screen printing material (8) is printed on the metallizing layer (6) forming the base metallization, that, following the curing of the screen printing material (8), remainders of the screen printing material (8) protruding from the underside of the carrier body (5) are removed by at least one mechanical cleaning process and/or by a chemical cleaning process, and that, following said at least one cleaning process, at least one further metallizing layer (17) forming the finished metallization is applied onto the metallizing layer (6) forming the base metallization.

8. (new) The method of claim 1, characterized in that mechanical brush grinding is used as said mechanical cleaning operation.

9. (new) The method of claim 1, characterized in that following the application of the metallization layer (17) forming the final metallization, the components of the circuit arrangement are attached to the top surface (12) of the carrier body (5) by a reflow soldering process.

10. (new) The method of claim 1, characterized in that a thermally conducting, electrically insulating film (9) is applied to the underside (13) of the carrier body (5).

11. (new) Method of claim 1, characterized in that said thermally conducting, electrically insulating film (9) is connected to a cooling body (10).

REMARKS:

- 1), Examination of the present U. S. National Phase Application is to proceed on the basis of claims 7 to 11. Claims 7 to 11 are directly based on the PCT International Application claims 1 to 5, incorporating the amendments under PCT Article 19, as literally translated into English, except for omitting multiple dependencies.
- 2) Favorable consideration and allowance of claims 7 to 11 are respectfully requested

Respectfully submitted,

Helmut HEINZ et al.
Applicant

WGF:ar/4231/PCT
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